

## CLAIMS

1. A biosensor which is provided with a cavity into which a liquid sample is drawn by capillary phenomenon, and is able to analyze a component in the liquid sample by a reaction between the drawn liquid sample and a reagent, wherein

the surface itself of at least a portion of side walls of the sensor, said side walls facing the cavity, has hydrophilicity.

2. A biosensor as defined in Claim 1 wherein

the side walls of the sensor facing the cavity are made of a resin material in which a surfactant is mixed.

3. A biosensor as defined in Claim 2 wherein

the amount of the surfactant to be mixed is 0.01 weight % or more.

4. A biosensor as defined in Claim 1 wherein

the side walls of the sensor facing the cavity are made of a film the surface of which is covered with a surfactant.

5. A biosensor as defined in Claim 1 wherein

the side walls of the sensor facing the cavity are made of a film the surface of which is covered with a resin having a hydrophilic polar group.

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6. A biosensor as defined in Claim 4 or 5 wherein  
the thickness of the surfactant or the resin having a  
hydrophilic polar group, which covers the film, is several tens  
of angstroms or more.
7. A biosensor as defined in Claim 1 wherein  
the surface of at least a portion of the side walls forming  
the cavity is chemically reformed.
8. A biosensor as defined in Claim 7 wherein  
a hydrophilic functional group is formed on the surface of at  
least a portion of the side walls facing the cavity, by  
subjecting the surface to any of the following treatments: plasma  
discharge, coupling reaction, ozone treatment, and UV treatment.
9. A biosensor as defined in Claim 1 wherein  
the surface of at least a portion of the side walls facing  
the cavity is made of a rough surface.
10. A biosensor as defined in Claim 9 wherein  
a rough surface is formed at the surface of at least a  
portion of the side walls facing the cavity, by subjecting the  
surface to any of the following treatments: sand blasting,  
electric discharge, non-glare treatment, mat treatment, and

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chemical plating.

11. A biosensor as defined in any of Claims 1 to 10 wherein the surface of the side wall, on which the reagent that reacts with the liquid sample is formed, has hydrophilicity.

12. A biosensor as defined in any of Claims 1 to 10 wherein the surface of the side wall, on which electrodes that detect the reaction between the liquid sample and the reagent are formed, has hydrophilicity.

13. A biosensor as defined in Claim 12 wherein the surface of the support is made of a rough surface, and the level of the rough surface to be formed is  $0.001\mu\text{m}$  to  $1\mu\text{m}$ .

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